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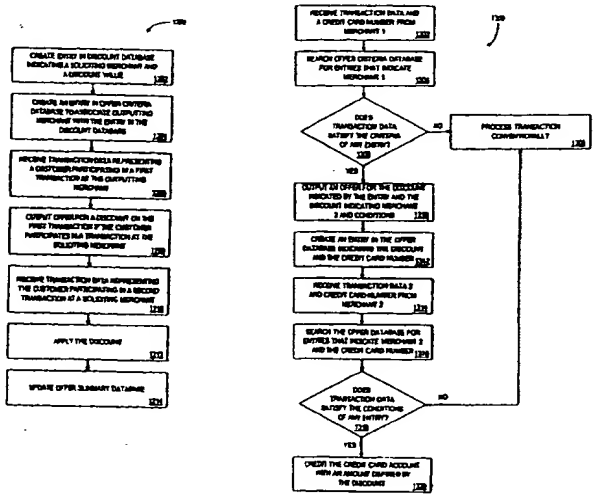

(57) Abstract

A server computer or other device determines whether a customer has consummated a first transaction with a first predetermined merchant and a second transaction with a second predetermined merchant. If so, the customer is provided with a bonus. In one embodiment, the server receives first transaction data representing a first transaction at a first merchant. The server determines, based on the first transaction data, a discount and a second merchant. The discount is applicable if the consumer consummates a second transaction at the second merchant. The server then outputs an indication of the discount and the second merchant to inform the customer. Subsequently, the server receives second transaction data representing the second transaction at the second merchant, and in response the discount is applied.

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METHOD AND APPARATUS FOR PROVIDING A DISCOUNT TO A CUSTOMER THAT PARTICIPATES IN TRANSACTIONS AT A PLURALITY OF MERCHANTS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is related to co-pending United States patent application Serial No. 09/098,240 entitled "SYSTEM AND METHOD FOR APPLYING AND TRACKING A CONDITIONAL VALUE COUPON FOR A RETAIL ESTABLISHMENT" filed on June 16, 1998 in the name of Jay S. Walker and Andrew S. Van Luchene; and is further related to co-pending United States patent application Serial No. 09/166,405 entitled "METHOD AND APPARATUS FOR DEFINING ROUTING OF CUSTOMERS BETWEEN MERCHANTS" filed on October 5, 1998 in the name of Jay S. Walker, Andrew Van Luchene, Daniel E. Tedesco, Magdalena Mik and James A. Jorasch (Attorney Docket No. WD2-98-048); and is further related to co-pending United States patent application Ser. No. 09/166,339 entitled "METHOD AND APPARATUS FOR MAINTAINING A CUSTOMER DATABASE USING LICENSE PLATE SCANNING" filed on October 5, 1998 in the name of Jay S. Walker, Joshua D. Rogers and Andrew S. Van Luchene (Attorney Docket No. WD2-98-059), each of which is assigned to the assignee of the present application and each of which is incorporated by reference herein as part of the present disclosure.

FIELD OF THE INVENTION

The present invention relates to methods and apparatus for providing discounts.

BACKGROUND OF THE INVENTION

Point-of-sale ("POS") terminals, such as cash registers, are used in a wide variety of businesses for performing such processes as calculating the total price of a purchase (goods or services), tracking inventory that is sold and calculating the amount of change due to a customer. In addition, POS terminals may also be used to read and process coupons used by customers and print coupons for customers.

When a customer uses a coupon during a transaction (e.g. a purchase of goods and/or services), a discount is applied to the transaction. For example, a price that a customer is charged for an item may be reduced, or the entire transaction price (sum of the prices of all items in the transaction) may be reduced. Businesses typically offer coupons to customers in an attempt to promote many objectives. One such objective is to entice customers to visit the business, thereby promoting customer retention. Coupons may further entice customers to visit the business more frequently. For example, a coupon may have an expiration date, and so the customer must use the coupon before that date or not at all. Businesses may also promote certain items by offering coupons that provide a discount only when those items are included in a purchase.

However, most discount offers that businesses provide cannot quickly respond to changing conditions of the business. For example, the business typically cannot know in advance precisely when it will need customers (i.e. "slow days") and when customers will be in abundance. Further, it is difficult to make customers aware of discounts in advance of when the customers will be most needed.

It would be advantageous to provide a method and apparatus for generating discounts that allowed a business to more effectively promote its various objectives.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method and apparatus for generating discounts that allowed a business to more effectively promote its various objectives.

In accordance with the present invention, a server computer or other device determines whether a customer has consummated a first transaction with a first predetermined merchant and a second transaction with a second predetermined merchant. If so, the customer is provided with a bonus.

In one embodiment, the server receives first transaction data representing a first transaction at a first merchant. The server determines, based on the first transaction data, a discount and a second merchant. The discount is applicable if the consumer consummates a second transaction at the second merchant. The server then outputs an indication of the discount and the second merchant to inform the customer. Subsequently, the server receives second transaction data representing the second transaction at the second merchant, and in response the discount is applied.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic illustration of an apparatus provided in accordance with the present invention.

FIG. 2 is a schematic illustration of a server of the apparatus of FIG. 1.

FIG. 3 is a schematic illustration of a store controller of the apparatus of FIG. 1.

FIG. 4 is a schematic illustration of a POS terminal of the apparatus of FIG. 1.

FIG. 5 is a schematic illustration of an embodiment of a merchant database of the server of FIG. 2.

FIG. 6 is a schematic illustration of an embodiment of an offer criteria database of the server of FIG. 2.

FIG. 7 is a schematic illustration of an embodiment of a discount database of the server of FIG. 2.

FIG. 8 is a schematic illustration of an embodiment of an offer database of the server of FIG. 2.

FIG. 9 is a schematic illustration of an embodiment of an offer summary database of the server of FIG. 2.

FIG. 10 is a schematic illustration of an embodiment of an inventory database of the POS terminal of FIG. 3.

FIG. 11 is a schematic illustration of an embodiment of a customer database of the POS terminal of FIG. 3.

FIG. 12 is a flow chart illustrating an embodiment of a method that is performed by the server of FIG. 2 in accordance with the present invention.

FIG. 13 is a flow chart illustrating another embodiment of a method that is performed by the server of FIG. 2 in accordance with the present invention.

FIG. 14 is a schematic illustration of an apparatus provided in accordance with an alternate embodiment of the present invention.

FIGS. 15A and 15B are a flow chart illustrating another embodiment of a method that is performed by a web browser in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

In accordance with the present invention, when a customer participates in a first transaction with a first merchant, it is determined whether the transaction meets particular criteria, such as a minimum purchase price. If the customer satisfies the criteria, then the first merchant, known as an "outputting merchant", outputs an offer for a discount to the customer.

The offer defines conditions that the customer must meet in order to receive the discount. The customer may meet the conditions while participating in a second transaction with a second merchant, known as a "soliciting merchant". For example, the customer may be required to spend at least a minimum purchase price at the second merchant on a particular day. Once the conditions are satisfied, the discount or other bonus is awarded to the customer. In one embodiment, the discount is applied by crediting a credit card account used during the first transaction.

The present invention is particularly advantageous in that it allows various merchants to participate in mutually beneficial "co-branding" opportunities. Bonuses may

be paid for by the soliciting merchant or may be partially funded by both the soliciting merchant and the outputting merchant based on offers provided and/or offers redeemed.

Referring to FIG. 1, an apparatus 10 includes a server 12 that is in communication with store controllers 14, 16 and 18 by means of a network such as Microsoft First Datacorp ("MSFDC"). The server 12 directs the operation of, stores data from, and transmits data to the store controllers 14, 16 and 18. The server 12 is a computing device that can communicate with one or more store controllers. The server 12 may be a computer that is owned and/or operated by a credit card clearinghouse such as First Data Corporation.

Although three store controllers are shown in FIG. 1, any number of store controllers may be in communication with the server 12 without departing from the spirit and scope of the present invention. The store controllers 14, 16 and 18 are typically located in different stores, such as in different stores of a mall. Similarly, the store controllers 14, 16 and 18 may each control different catalog merchants. The store controllers may also be computers that direct an "online store", such as a web server that receives and processes orders for goods. The server 12 may perform many of the processes described below as performed by a store controller, especially those processes that are performed for more than one store controller. The server 12 may also store data that is used by more than one store controller.

Each store controller is in communication with one or more POS terminals. Specifically, the store controller 14 is in communication with POS terminals 20 and 22, the store controller 16 is in communication with a POS terminal 24 and the store controller 18

is in communication with POS terminals 26 and 28. The POS terminals may be, for example, the NCR 7454 manufactured by NCR Corporation or the IBM 4683 manufactured by International Business Machines. Each store controller directs the operation of, stores data from, and transmits data to the POS terminal(s) with which it is in communication. For example, as described below, each store controller may store a database of inventory to indicate to the POS terminals the prices of items purchased.

Referring to FIG. 2, the server 12 includes a processor 202 that comprises one or more conventional microprocessors such as the Intel® Pentium® microprocessor. The processor 202 is in communication with a data storage device 204, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 202 and the storage device 204 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the server 12 may comprise one or more computers that are connected to a remote computer for maintaining databases.

The processor 202 is also in communication with an input device 206, a printer 208 and a display device 210. The input device 206 may comprise a keypad for transmitting input signals to the processor 202. Other types of input devices are known to those skilled in the art. The printer 208 is for registering indicia on paper or other material. The display device 210 is operative to display at least alphanumeric characters, and thus may be any of a number of known video monitors, liquid crystal displays ("LCD") or light

emitting diode ("LED") displays. Many types of input devices and display devices are known to those skilled in the art, and need not be described in detail herein.

The storage device 204 stores a server control program 220 for controlling the processor 202. The processor 202 performs instructions of the server control program 220 and thereby operates in accordance with the present invention and particularly in accordance with the methods described in detail herein. The server control program 220 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 202 to interface with computer peripheral devices, such as the input device 206 and the display device 210. Appropriate device drivers and other necessary program elements are known to those skilled in the art and need not be described in detail herein.

The storage device 204 also stores (i) a merchant database 222, (ii) an offer criteria database 224, (iii) a discount database 226, (iv) an offer database 228, and (v) an offer summary database 230. In addition, the store controllers 14, 16 and 18 may query the server 12 to obtain information from the databases stored by the server. In another embodiment, one or more of the store controllers 14, 16 and 18 may store one or more of the databases 222, 224, 226, 228 and 230. The databases 222, 224, 226, 228 and 230 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary

information, but those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 3, the following description of the store controller 14 is likewise descriptive of the store controllers 16 and 18 (FIG. 1). The store controller 14 includes a processor 302 that comprises one or more conventional microprocessors such as the Intel® Pentium® microprocessor. The processor 302 is in communication with a data storage device 304, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 302 and the storage device 304 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the store controller 14 may comprise one or more computers that are connected to a remote computer for maintaining databases.

The processor 302 is also in communication with an input device 306, a printer 308 and a display device 310. The input device 306 preferably comprises a keypad for transmitting input signals to the processor 302. The printer 308 is for registering indicia on paper or other material. The display device 310 is operative to display at least alphanumeric characters to the customer and/or cashier, and thus may be any of a number of known video monitors, liquid crystal displays ("LCD") or light emitting diode ("LED") displays. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein.

The storage device 304 stores a store controller control program 320 for controlling the processor 302. The processor 302 performs instructions of the store controller control program 320 and thereby operates in accordance with the present invention and particularly in accordance with the methods described in detail herein. The store controller control program 320 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 302 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art and need not be described in detail herein.

The storage device 304 also stores (i) an inventory database 322, and (ii) a customer database 324. In another embodiment, one or more of the POS terminals 20 and 22 may store one or more of the databases 322 and 324. The databases 322 and 324 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides the tables shown. Similarly, the illustrated entries represent exemplary information, but those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 4, the following description of the POS terminal 20 is likewise descriptive of the POS terminals 22, 24, 26 and 28 (FIG. 1). The POS terminal 20 includes a processor 402 that comprises one or more conventional microprocessors such as

the Intel® Pentium® microprocessor. The processor 402 is in communication with a data storage device 404, such as an appropriate combination of magnetic, optical and/or semiconductor memory. The processor 402 and the storage device 404 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. For example, the POS terminal 20 may comprise one or more computers that are connected to a remote computer for maintaining databases.

The processor 402 is also in communication with an input device 406, a printer 408 and a display device 410. The input device 406 may comprise one or more of (i) a keypad for transmitting input signals to the processor 402; (ii) a card reader for reading magnetically-encoded information on cards passed therethrough, such as credit cards, frequent shopper cards and identity cards; (iii) an optical scanner for reading bar codes, such as bar codes registered on items of inventory; and (iv) a touch screen for generating signals that indicate when and where the screen has been touched, pressed or actuated. The printer 408 is for registering indicia on paper or other material, thereby printing receipts, coupons and vouchers as commanded by the processor 402. The display device 410 is operative to display at least alphanumeric characters to the customer and/or cashier, and thus may be any of a number of known video monitors, liquid crystal displays ("LCD") or light emitting diode ("LED") displays. Many types of input devices, printers and display devices are known to those skilled in the art, and need not be described in detail herein.

The storage device 404 stores a POS terminal control program 420 for controlling the processor 402. The processor 402 performs instructions of the POS terminal control program 420 and thereby operates in accordance with the present invention and particularly in accordance with the methods described in detail herein. The POS terminal control program 420 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 402 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art and need not be described in detail herein.

Referring to FIG. 5, a table 500 illustrates an embodiment of the merchant database 222 (FIG. 2). The table 500 includes entries 502, 504 and 506, each of which describes a merchant that owns, operates or controls a store controller. It will be understood by those skilled in the art that the table 500 may include any number of entries. The table 500 also defines fields for each of the entries 502, 504 and 506, which specify (i) a merchant identifier 520 for uniquely identifying the merchant, (ii) a name 522 of the merchant, (iii) an address 524 of the merchant, (iv) a standard industry classification ("SIC") code 526 of the merchant, (v) billing instructions 528 indicating how the merchant will be billed, (vi) an amount owed 530 by the merchant, and (vii) a payment due date 532 on which the merchant must remit payment.

Referring to FIG. 6, a table 600 illustrates an embodiment of the offer criteria database 224 (FIG. 2). The table 600 includes entries 602, 604, 606 and 608, each of which describes criteria for defining when to provide an offer for a discount. The offer

is provided to a customer if the customer satisfies criteria while participating in a first transaction with a first merchant. The first merchant, known as an "outputting merchant", outputs the offer for a discount once the customer satisfies the criteria. It will be understood by those skilled in the art that the table 600 may include any number of entries. The table 600 also defines fields for each of the entries 602, 604, 606 and 608, which specify (i) a criteria identifier 622 for uniquely identifying the criteria, (ii) a merchant identifier 624 that identifies the first (outputting) merchant, (iii) a required purchase price 626 that must be met in order to receive an offer for the discount, (iv) a time of the transaction 628 that must be met in order to receive an offer for the discount, and (v) a discount identifier 630 that uniquely identifies the discount.

The customer is required to participate in a transaction at the first merchant in order to receive the offer for the discount. The customer may also be required to participate in the transaction at an indicated time, and the transaction may be required to have an indicated purchase price and include an indicated item. For example, the entry 606 indicates a discount identified by "D0001". A customer receives an offer for the discount "D0001" after having participated in a transaction for more than $10.00 at merchant "M0001" on a weekday before 5:00 PM. Further criteria may be specified as will be understood by those skilled in the art.

Referring to FIG. 7, a table 700 illustrates an embodiment of the discount database 226 (FIG. 2). The table 700 includes entries 702, 704, 706 and 708, each of which describes a discount that may be offered to a customer of a first merchant and conditions which the customer must meet at a second merchant in order to receive the

discount. The discount is typically awarded once the customer participates in a transaction with a second (soliciting) merchant, subject to the customer meeting the conditions. It will be understood by those skilled in the art that the table 700 may include any number of entries. The table 700 also defines fields for each of the entries 702, 704, 706 and 708, which specify (i) a discount identifier 720 for uniquely identifying the discount, (ii) a discount value 722, (iii) a merchant identifier 724 that identifies the second (soliciting) merchant, (iv) a time of the transaction 726 with the soliciting merchant, (v) a required purchase price 728 at the soliciting merchant, and (vi) a required item to purchase 730, if any. The time of the second transaction, required purchase price at the soliciting merchant, and required item to purchase each represent a condition which the customer must meet in order to receive the discount. Many other conditions may be used as well.

The discount value is typically expressed as, for example, a percentage off the previous (first) transaction during which the offer for the discount was made. The discount value may also be expressed as a percentage off the current transaction. The customer is required to participate in a transaction at the second merchant in order to receive the discount. The customer may also be required to participate in a transaction at an indicated time, having an indicated purchase price and including an indicated item. For example, the entry 708 indicates a discount of five percent off the previous transaction. A customer receives this discount after having participated in a transaction for more than $10.00 at merchant "M0001" on Saturday between 9:00 and 12:00.

Referring to FIG. 8, a table 800 illustrates an embodiment of the offer database 228 (FIG. 2). The table 800 includes entries 802, 804 and 806, each of which

describes an offer for a discount that has been provided to a customer. It will be understood by those skilled in the art that the table 800 may include any number of entries. The table 800 also defines fields for each of the entries 802, 804 and 806, which specify (i) an offer identifier 820 for uniquely identifying the offer; (ii) a discount identifier 822 that uniquely identifies the discount that has been offered; (iii) a criteria identifier 824 that uniquely identifies the criteria that the customer satisfied in order to be offered the discount; (iv) a customer identifier 826 that uniquely identifies the customer; (v) an offer status 828 which may indicate, for example, whether (and when) the offer is redeemed, unredeemed or expired; and (vi) a validity period 830 that indicates when the discount is able to be redeemed.

Referring to FIG. 9, a table 900 illustrates an embodiment of the offer summary database 230 (FIG. 2). The table 900 includes entries 902, 904, 906 and 908, each of which describes summary information about discounts that have been offered to customers. It will be understood by those skilled in the art that the table 900 may include any number of entries. The table 900 also defines fields for each of the entries 902, 904, 906 and 908, which specify (i) an discount identifier 920 for uniquely identifying the discount, (ii) a number of offers for the discount that were provided 922, (iii) a number of offers for the discount that were redeemed 924, (iv) a number of offers for the discount that were unredeemed 926 (neither redeemed nor expired), and (v) a number of offers for the discount that were expired 928 (not redeemed before the end of the validity period of the offer). The number of offers for the discount that were provided is the sum of the number of offers for the discount that were redeemed, the number of offers for the discount that

were unredeemed and the number of offers for the discount that were expired. Those skilled in the art will understand that the summary information may also be organized by offer or by offer and discount jointly, rather than by discount as illustrated in FIG. 9. The information in the offer summary database 230 may be updated periodically (e.g. once per day) to reflect offers that have expired or been redeemed.

Referring to FIG. 10, a table 1000 illustrates an embodiment of the inventory database 322 (FIG. 3). The table 1000 includes entries 1002 and 1004, each of which describes an item of inventory that is sold by a merchant. It will be understood by those skilled in the art that the table 1000 may include any number of entries. The table 1000 also defines fields for each of the entries 1002 and 1004, which specify (i) an inventory identifier 1020 for uniquely identifying the item of inventory, (ii) a description 1022 of the item of inventory, (iii) a price 1024 for which the item of inventory is sold, and (iv) a quantity remaining 1026 of the item of inventory.

Referring to FIG. 11, a table 1100 illustrates an embodiment of the customer database 324 (FIG. 3). The table 1100 includes entries 1102, 1104 and 1106, each of which describes a customer of the merchant. The customer information is typically recorded by the customer database 324 upon becoming registered for a "frequent shopper program" of the store. It will be understood by those skilled in the art that the table 1100 may include any number of entries. The table 1100 also defines fields for each of the entries 1102, 1104 and 1106, which specify (i) a customer identifier 1120 for uniquely identifying the customer, (ii) a name 1122 of the customer, (iii) an address 1124 of the customer, and (iv) a credit card number 1126, if any, of the customer. In one embodiment,

the customer identifier may be the credit card number. Accordingly, a customer using a credit card could be identified even if he had not registered for a frequent shopper program. In another embodiment, the customer identifier is read from a license plate of a car. Such an embodiment may be used to identify customers of a "drive-through". A method and apparatus for reading a license plate to identify a customer are described in commonly-owned co-pending U.S. Patent Application Serial No. ___, entitled "METHOD AND APPARATUS FOR MAINTAINING A CUSTOMER DATABASE USING LICENSE PLATE SCANNING", Attorney Docket No. 98-059, filed on an even date herewith.

Referring to FIG. 12, a flow chart 1200 illustrates an embodiment of a method that is performed by the server 12 (FIG. 1) in accordance with the present invention. The server 12 creates in the discount database 226 (FIG. 2) an entry that indicates a soliciting merchant and a discount value (step 1202). Such an entry may be created, for example, in response to a request from the soliciting merchant or upon receiving a signal indicating that there are not many customers currently patronizing the soliciting merchant. The entry may also include conditions, such as time of transaction, purchase price and/or item to purchase.

The server 12 creates in the offer criteria database 224 (FIG. 2) an entry that associates the aforementioned entry in the discount database 226 with an outputting merchant (step 1204). This entry in the offer criteria database 224 may be created, for example, based on historical redemption of such discounts by customers of the outputting merchant. For example, if customers of merchant "A" have historically redeemed discounts at merchant "B", than merchant "A" may be a good candidate for an outputting

merchant. This entry in the offer criteria database 224 may be created, for example, based on a determination that there are many

The entry in the offer criteria database 224 may also include conditions, such as time of transaction, purchase price and/or item(s) to purchase.

The entries created in steps 1202 and 1204 generally define a "routing" of customers from the outputting merchant to the soliciting merchant. When a customer participates in a transaction at the outputting merchant, he is offered a discount provided that he participates in a transaction at the soliciting merchant. Thus, the customer is given an incentive to participate in a transaction at the soliciting merchant.

The server 12 receives transaction data representing a customer participating in a first transaction at the outputting merchant (step 1206). At step 1208, the server 12 outputs to the appropriate store controller, which in turn outputs to the POS terminal with which the customer interacts, an offer for a discount corresponding to the entry created in step 1202. The server 12 also creates in step 1208 in the offer database 228 (FIG. 2) an entry indicating (i) both of the entries created in steps 1202 and 1204, (ii) a customer identifier that identifies the customer, and (iii) a validity period of the offer for a discount. The customer identifier may be a credit card number that identifies a credit card account used by the customer in the transaction.

The customer subsequently participates in a second transaction at the soliciting merchant, and the server 12 receives transaction data representing the second transaction (step 1210). The server 12 recognizes that the customer participating in the second transaction is the same customer that has been offered a discount. For example, if

the customer uses the same credit card (or other identifier such as a frequent shopper identifier) in this second transaction, the server 12 can search the offer database 228 to find entries that indicate the customer identifier. Of these entries indicating the customer identifier, the server 12 determines which include a discount identifier that indicates the soliciting merchant. The server selects the entry created in step 1208 (and possibly other entries) and therefrom determines the discount indicated by the entry created in step 1202.

In another embodiment, the server 12 recognizes that the customer participating in the second transaction is the same customer that has been offered a discount by a voucher printed during the first transaction. For example, a bar code printed on the voucher can be scanned by a POS terminal during the second transaction. The bar code can indicate the appropriate entry in the offer database, and so the server may determine the discount for which the customer is eligible.

In response, the discount indicated by the entry created in step 1202 is applied (step 1212) and the customer receives the benefit of the discount. Typically, the discount is applied by crediting the credit card account by the amount indicated by the discount. The offer summary database 230 (FIG. 2) is then updated to indicate that the discount has been redeemed (step 1214).

Referring to FIG. 13, a flow chart 1300 illustrates an embodiment of a method that is performed by the server 12 (FIG. 1) in accordance with the present invention. The server 12 receives transaction data and a credit card number from "merchant 1" (step 1302), typically via a POS terminal in communication with a store controller of "merchant 1". The credit card number identifies a credit card account that a

customer has used to pay for the transaction. The server 12 in response searches the offer criteria database 224 (FIG. 2) for entries that indicate "merchant 1" (step 1304). For example, the field 624 (FIG. 6) of the table 600 (FIG. 6) indicates an outputting merchant for each entry.

As described above, each entry of the offer criteria database 224 also indicates criteria, such as a required purchase price or a required time of the transaction. The server 12 determines whether the transaction satisfies the criteria indicated by the entry (or entries) indicating "merchant 1" (step 1306). If not, then the transaction is processed conventionally (step 1308). If the transaction does satisfy the criteria, then the server 12 outputs an offer for the discount indicated by the entry (step 1310). As described above, the discount can be indicated by an entry in the discount database 226 (FIG. 2) which indicates a discount value as well as a soliciting merchant ("merchant 2") and conditions which the customer must meet at the soliciting merchant in order to receive the discount. The server 12 creates an entry in the offer database 228 of FIG. 2 (step 1312) to indicate the discount and the credit card number.

In another embodiment, the step 1310 may comprise outputting a plurality of offers, each for a different discount. In such an embodiment, the customer would select which discount he preferred. The operator of the POS terminal could then indicate the selected discount, and thus indicate a selected entry of the of the offer criteria database 224.

Subsequently, the customer participates in a transaction with "merchant 2" and uses the same credit card account to pay for the transaction. Accordingly, the server

12 receives transaction data and the credit card number from "merchant 2" (step 1314), typically via a POS terminal in communication with a store controller of "merchant 2". The server 12 in response searches the offer database 228 (FIG. 2) for entries that indicate "merchant 2" and the credit card number (step 1316). For example, the field 822 (FIG. 8) of the table 800 (FIG. 8) indicates a discount, and the discount in turn indicates a soliciting merchant (e.g. in the field 724 of FIG. 7). Similarly, the field 826 indicates customer identifiers, which may be credit card numbers.

The entry (or entries) that indicate "merchant 2" and the credit card number likewise indicate conditions. For example, the field 822 (FIG. 8) of the table 800 (FIG. 8) indicates a discount, and the discount in turn indicates conditions such as a required time of the transaction, a required purchase price and required items to purchase. If it is determined that the transaction with "merchant 2" does not satisfy the conditions (step 1318), then the transaction with "merchant 2" is processed conventionally (step 1308). However, if the conditions are satisfied, then the credit card account is credited with an amount defined by the discount (e.g. as defined by the discount value field 722 of FIG. 7).

The present invention may also be advantageously employed in an embodiment where the customer conducts transactions remotely via a personal computer or similar device for communicating remotely with a store controller. For example, a customer may use his computer to access the world wide web sites of merchants, indicate purchases, and pay by transmitting a credit card number to the merchants. In such an embodiment, any or all of the above-described databases could be stored (i) on the computer of an Internet service provider ("ISP"), (ii) on another computer on the Internet,

or (iii) locally on the consumer's computer (e.g. in the browser software or in a "cookie" or other file).

Referring to FIG. 14, an apparatus 1400 includes a user computer 1410 that is in communication with an Internet service provider computer 1420. The user computer 1410 is typically a personal computer operated by the customer and equipped to access the Internet or other electronic network. The Internet service provider computer 1420 is a computer that enables the user computer 1410 to access the Internet in a manner known in the art. The Internet service provider computer 1420 is in turn in communication through the Internet with a soliciting merchant computer 1430 and an outputting merchant computer 1440 in a manner known in the art. As is also known in the art, the soliciting merchant computer 1430 and the outputting merchant computer 1440 may control "web sites" that are respectively accessed by the user computer 1410 upon entering appropriate commands.

Referring to FIGS. 15A and 15B, a flow chart 1500 illustrates another embodiment of a method that is performed by the user computer 1410 (FIG. 14) in accordance with the present invention. The steps of this method may be performed in whole or in part by "browser" software, such as Netscape's Communicator® or Microsoft's Internet Explorer®, that is executed by the computer.

The user computer 1410 accesses the web site of an outputting merchant, "merchant 1" (step 1502) which allows customers to place orders online. The user computer 1410 receives transaction data and a credit card number from the customer (step 1504), and transmits the transaction data and credit card number to the outputting merchant

computer 1440 of FIG. 14 (step 1506). The credit card number identifies a credit card account that the customer has used to pay for the transaction. The customer may render payment in other ways besides identifying a credit card account to be charged.

Once the outputting merchant computer 1440 receives the transaction data, it determines whether the customer has satisfied criteria, if any, to qualify for an offer for a discount. If so, then the user computer 1410 receives data from the outputting merchant computer 1440 that indicates the discount (step 1508). The discount and any associated conditions are stored (step 1510), for example, in a cookie or other file on the user computer 1410 or on the Internet service provider computer 1420 (FIG. 14). The conditions may also be stored on the soliciting merchant computer 1430 (FIG. 14) or the outputting merchant computer 1440 (FIG. 14).

The user computer 1410 creates a link that displays an offer for the discount (step 1512). The link may be a hyperlink, banner advertisement, additional frame, new window, or other element on the web site of the outputting merchant. Alternatively, the outputting merchant computer 1440 may alter the web site that is accessed by the user computer 1410. If the customer wishes to take advantage of the offer and make a purchase from another (soliciting) merchant, the user computer 1410 receives a command from the customer to connect to the link (step 1514) and thus access the web site of the soliciting merchant, "merchant 2" (step 1516).

The web site of "merchant 2" likewise allows customers to place orders online. The user computer 1410 receives transaction data and the credit card number from the customer (step 1518), and transmits this transaction data and credit card number to the

soliciting merchant computer 1430 of FIG. 14 (step 1520). If the transaction with the soliciting merchant does not satisfy the conditions (step 1522), then the transaction is processed in a conventional manner (step 1524). Otherwise, the credit card account is credited (step 1526) with an amount defined by the discount.

As described above, the discount is applied to the customer account upon completion of a second transaction at the soliciting merchant. However, in another embodiment of the present invention, the customer may be further required to complete another transaction at the first merchant. Accordingly, the customer would have to participate in a first transaction at a first merchant, a second transaction at a second merchant, and then a third transaction at the first merchant. Although the customer may be required to meet certain conditions during the third transaction, typically the customer need not be so restrained.

The foregoing embodiment is particularly advantageous in an embodiment where the customer participates in transactions on web sites accessed by his computer. For example, when participating in a first transaction at the web site of the first merchant, a link, such as a banner advertisement, may appear directing the customer to the web site of the second merchant. Upon participating in a transaction with the second merchant, another banner advertisement may appear directing the customer back to the web site of the first merchant. Upon accessing the web site of the first merchant again, the discount could be applied.

In another embodiment of the present invention, the customer may be required to participate in a transaction with more than two merchants. For example, a

customer may participate in a first transaction at a first merchant. In response, the customer may be offered a discount for consummating a second transaction at a second merchant and a third transaction at a third merchant. In such an embodiment, the second merchant and third merchant could both be soliciting merchants.

The present invention is also applicable to functions besides transactions. In one embodiment, a customer participating in a first transaction with a first merchant may be offered a discount for completing a survey, rather than for participating in a second transaction. The customer could be provided with a survey at the same (first) merchant or at another merchant.

For example, after participating in a transaction at a first web site, the first web site would output an offer for a discount in exchange for completing a survey at a second web site. A link to the second web site would be generated to allow the customer to easily access the second web site. Upon accessing the second web site, the customer would be presented with one or more survey questions, and would be prompted to provide answers to each questions. Upon providing an answer to all (or a minimum number of) survey questions, the discount would be applied.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention. For example, although the discount may be a credit applied to a credit card account, there are many other discounts, such as the transfer of electronic cash or frequent shopper points to the customer.

What is claimed is:

1. A method for providing a discount, comprising:

receiving first transaction data representing a first transaction at a first merchant;

determining whether the first transaction data satisfies a criterion;

generating an offer for a discount if the first transaction data satisfies the criterion, the discount including a condition and a second merchant; and

outputting an indication of the offer.

2. The method of claim 1, further comprising:

receiving second transaction data representing a second transaction at a second merchant;

determining whether the second transaction data satisfies the condition; and

applying the discount to a customer account.

3. The method of claim 1, further comprising:

receiving a credit card number that identifies a credit card account.

4. The method of claim 3, in which the step of applying the discount comprises:

crediting the credit card account.

5. A method for providing a discount, comprising:

receiving transaction data representing a first transaction at a first merchant, the transaction data including a credit card identifier that identifies a credit card account;

determining, based on the transaction data, a retroactive discount and a second merchant, the retroactive discount to be applied to the credit card account if the consumer consummates a second transaction at the second merchant; and

outputting an indication of the retroactive discount and the second merchant.

6. The method of claim 5, further comprising:

receiving second transaction data representing a second transaction at a second merchant;

determining whether the second transaction data satisfies the condition; and

applying the discount to a customer account.

7. The method of claim 5, in which the step of applying the discount comprises:

crediting the credit card account.

8. A method for providing a discount, comprising:

receiving transaction data representing a first transaction at a first merchant, the transaction data including a transaction price;

determining, based on the transaction data, a discount and a second merchant, the discount having a value based on the transaction price; and

outputting an indication of the discount and the second merchant.

9. A method for providing a discount, comprising:

receiving transaction data representing a transaction at a first merchant, the transaction data including a customer identifier;

determining, based on the customer identifier, whether the transaction data satisfies a condition for a discount, the discount having a value based on a previous transaction price; and

applying the discount to a customer account.

10. The method of claim 9, further comprising:

determining the condition based on the transaction data.

11. A method for providing a discount, comprising:

receiving transaction data representing a transaction at a first merchant;

receiving a customer identifier;

determining from the customer identifier a retroactive discount including a condition;

determining whether the transaction data satisfies the condition; and

applying the retroactive discount to a customer account.

12. The method of claim 11, in which the customer identifier is a credit card number.

13. A method for providing a discount, comprising:

determining whether a customer has consummated a first transaction with a first predetermined merchant;

determining whether the customer has consummated a second transaction with a second predetermined merchant; and

providing a bonus to the customer if the customer has consummated the first transaction at the first predetermined merchant and the second transaction at the second predetermined merchant.

14. The method of claim 13 in which the bonus comprises a credit to an account in an amount that is based on a transaction price of the first transaction.

15. A method for providing a discount, comprising:

receiving first transaction data representing a first transaction at a first merchant;

determining, based on the first transaction data, a discount and a second merchant, the discount being applicable if the consumer consummates a second transaction at the second merchant;

outputting an indication of the discount and the second merchant;

receiving second transaction data representing the second transaction at the second merchant after the step of receiving first transaction data; and

applying the discount.

16. A method for providing a discount, comprising:

receiving first transaction data representing a first transaction at a first merchant, the first transaction data including a credit card identifier that identifies a credit card account;

determining, based on the first transaction data, a discount, the discount including a condition and a second merchant;

outputting an indication of the discount;

storing an indication of the discount and the credit card identifier in a database;

receiving second transaction data representing a second transaction at the second merchant, the second transaction data including the credit card identifier;

searching the database to select the discount based on the credit card identifier;

determining whether the second transaction data satisfies the condition; and

applying the discount to the credit card account if the second transaction data satisfies the condition.

17. An apparatus for providing a discount, comprising:

means for receiving first transaction data representing a first transaction at a first merchant;

means for determining whether the first transaction data satisfies a criterion;

means for generating an offer for a discount if the first transaction data satisfies the criterion, the discount including a condition and a second merchant; and

means for outputting an indication of the offer.

18. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive first transaction data representing a first transaction at a first merchant;

determine whether the first transaction data satisfies a criterion;

generate an offer for a discount if the first transaction data satisfies the criterion, the discount including a condition and a second merchant; and

output an indication of the offer.

19. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving first transaction data representing a first transaction at a first merchant;

determining whether the first transaction data satisfies a criterion;

generating an offer for a discount if the first transaction data satisfies the criterion, the discount including a condition and a second merchant; and

outputting an indication of the offer.

20. An apparatus for providing a discount, comprising:

means for receiving transaction data representing a first transaction at a first merchant, the transaction data including a credit card identifier that identifies a credit card account;

means for determining, based on the transaction data, a retroactive discount and a second merchant, the retroactive discount to be applied to the credit card account if the consumer consummates a second transaction at the second merchant; and

means for outputting an indication of the retroactive discount and the second merchant.

21. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive transaction data representing a first transaction at a first merchant, the transaction data including a credit card identifier that identifies a credit card account;

determine, based on the transaction data, a retroactive discount and a second merchant, the retroactive discount to be applied to the credit card account if the consumer consummates a second transaction at the second merchant; and

output an indication of the retroactive discount and the second merchant.

22. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving transaction data representing a first transaction at a first merchant, the transaction data including a credit card identifier that identifies a credit card account;

determining, based on the transaction data, a retroactive discount and a second merchant, the retroactive discount to be applied to the credit card account if the consumer consummates a second transaction at the second merchant; and

outputting an indication of the retroactive discount and the second merchant.

23. An apparatus for providing a discount, comprising:

means for receiving transaction data representing a first transaction at a first merchant, the transaction data including a transaction price;

means for determining, based on the transaction data, a discount and a second merchant, the discount having a value based on the transaction price; and

means for outputting an indication of the discount and the second merchant.

24. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive transaction data representing a first transaction at a first merchant, the transaction data including a transaction price;

determine, based on the transaction data, a discount and a second merchant, the discount having a value based on the transaction price; and

output an indication of the discount and the second merchant.

25. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving transaction data representing a first transaction at a first merchant, the transaction data including a transaction price;

determining, based on the transaction data, a discount and a second merchant, the discount having a value based on the transaction price; and

outputting an indication of the discount and the second merchant.

26. An apparatus for providing a discount, comprising:

means for receiving transaction data representing a transaction at a first merchant, the transaction data including a customer identifier;

means for determining, based on the customer identifier, whether the transaction data satisfies a condition for a discount, the discount having a value based on a previous transaction price; and

means for applying the discount to a customer account.

27. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive transaction data representing a transaction at a first merchant, the transaction data including a customer identifier;

determine, based on the customer identifier, whether the transaction data satisfies a condition for a discount, the discount having a value based on a previous transaction price; and

apply the discount to a customer account.

28. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving transaction data representing a transaction at a first merchant, the transaction data including a customer identifier;

determining, based on the customer identifier, whether the transaction data satisfies a condition for a discount, the discount having a value based on a previous transaction price; and

applying the discount to a customer account.

29. An apparatus for providing a discount, comprising:

means for receiving transaction data representing a transaction at a first merchant;

means for receiving a customer identifier;

means for determining from the customer identifier a retroactive discount including a condition;

means for determining whether the transaction data satisfies the condition; and

means for applying the retroactive discount to a customer account.

30. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive transaction data representing a transaction at a first merchant;

receive a customer identifier;

determine from the customer identifier a retroactive discount including a condition;

determine whether the transaction data satisfies the condition; and

apply the retroactive discount to a customer account.

31. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving transaction data representing a transaction at a first merchant;

receiving a customer identifier;

determining from the customer identifier a retroactive discount including a condition;

determining whether the transaction data satisfies the condition; and

applying the retroactive discount to a customer account.

32. An apparatus for providing a discount, comprising:

means for determining whether a customer has consummated a first transaction with a first predetermined merchant;

means for determining whether the customer has consummated a second transaction with a second predetermined merchant; and

means for providing a bonus to the customer if the customer has consummated the first transaction at the first predetermined merchant and the second transaction at the second predetermined merchant.

33. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

determine whether a customer has consummated a first transaction with a first predetermined merchant;

determine whether the customer has consummated a second transaction with a second predetermined merchant; and

provide a bonus to the customer if the customer has consummated the first transaction at the first predetermined merchant and the second transaction at the second predetermined merchant.

34. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

determining whether a customer has consummated a first transaction with a first predetermined merchant;

determining whether the customer has consummated a second transaction with a second predetermined merchant; and

providing a bonus to the customer if the customer has consummated the first transaction at the first predetermined merchant and the second transaction at the second predetermined merchant.

35. An apparatus for providing a discount, comprising:

means for receiving first transaction data representing a first transaction at a first merchant;

means for determining, based on the first transaction data, a discount and a second merchant, the discount being applicable if the consumer consummates a second transaction at the second merchant;

means for outputting an indication of the discount and the second merchant;

means for receiving second transaction data representing the second transaction at the second merchant after the step of receiving first transaction data; and

means for applying the discount.

36. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive first transaction data representing a first transaction at a first merchant;

determine, based on the first transaction data, a discount and a second merchant, the discount being applicable if the consumer consummates a second transaction at the second merchant;

output an indication of the discount and the second merchant;

receive second transaction data representing the second transaction at the second merchant after the step of receiving first transaction data; and

apply the discount.

37. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving first transaction data representing a first transaction at a first merchant;

determining, based on the first transaction data, a discount and a second merchant, the discount being applicable if the consumer consummates a second transaction at the second merchant;

outputting an indication of the discount and the second merchant;

receiving second transaction data representing the second transaction at the second merchant after the step of receiving first transaction data; and

applying the discount.

38. An apparatus for providing a discount, comprising:

means for receiving first transaction data representing a first transaction at a first merchant, the first transaction data including a credit card identifier that identifies a credit card account;

means for determining, based on the first transaction data, a discount, the discount including a condition and a second merchant;

means for outputting an indication of the discount;

means for storing an indication of the discount and the credit card identifier in a database;

means for receiving second transaction data representing a second transaction at the second merchant, the second transaction data including the credit card identifier;

means for searching the database to select the discount based on the credit card identifier;

means for determining whether the second transaction data satisfies the condition; and

means for applying the discount to the credit card account if the second transaction data satisfies the condition.

39. An apparatus for providing a discount, comprising:

a storage device; and

a processor connected to the storage device,

the storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive first transaction data representing a first transaction at a first merchant, the first transaction data including a credit card identifier that identifies a credit card account;

determine, based on the first transaction data, a discount, the discount including a condition and a second merchant;

output an indication of the discount;

store an indication of the discount and the credit card identifier in a database;

receive second transaction data representing a second transaction at the second merchant, the second transaction data including the credit card identifier;

search the database to select the discount based on the credit card identifier;

determine whether the second transaction data satisfies the condition; and

apply the discount to the credit card account if the second transaction data satisfies the condition.

40. A computer readable medium encoded with processing instructions for implementing a method performed by a computer for providing a discount, the method comprising:

receiving first transaction data representing a first transaction at a first merchant, the first transaction data including a credit card identifier that identifies a credit card account;

determining, based on the first transaction data, a discount, the discount including a condition and a second merchant;

outputting an indication of the discount;

storing an indication of the discount and the credit card identifier in a database;

receiving second transaction data representing a second transaction at the second merchant, the second transaction data including the credit card identifier;

searching the database to select the discount based on the credit card identifier;

determining whether the second transaction data satisfies the condition; and

applying the discount to the credit card account if the second transaction data satisfies the condition.

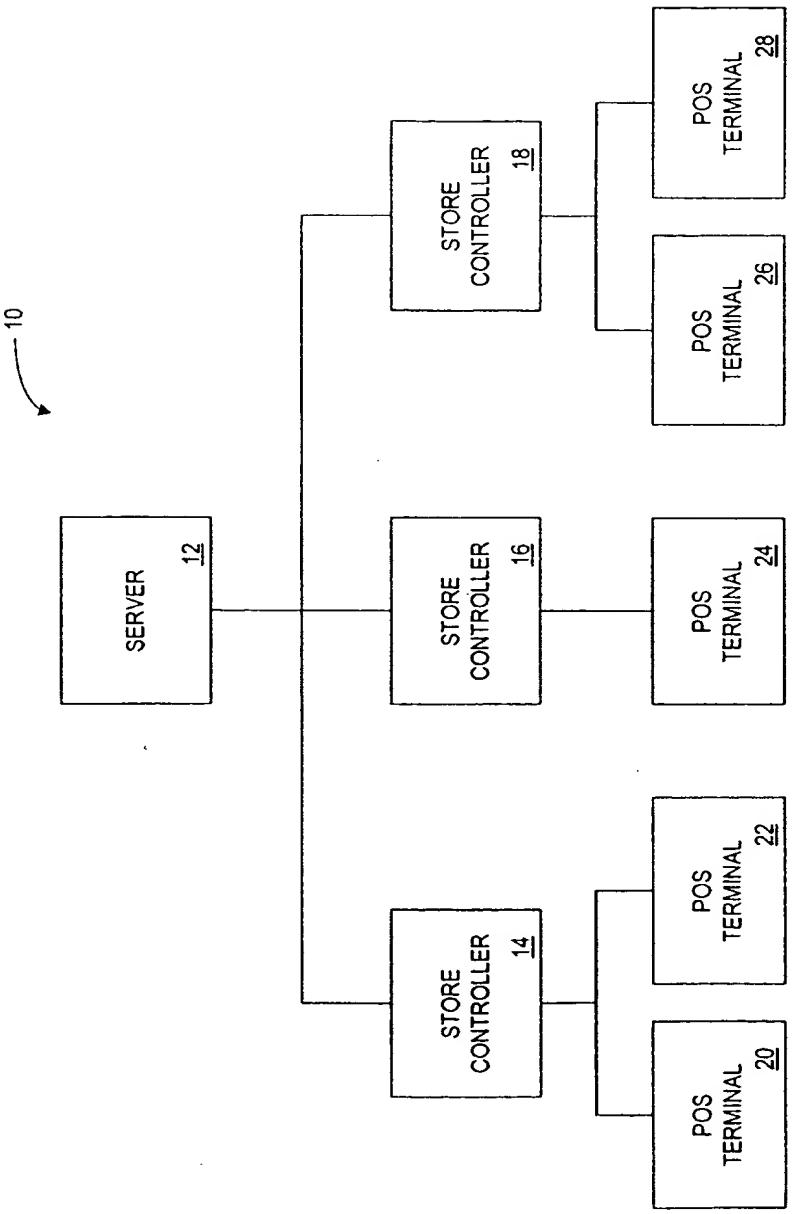
10
SERVER
12
STORE CONTROLLER
14
STORE CONTROLLER
16
STORE CONTROLLER
18
POS TERMINAL
20
POS TERMINAL
22
POS TERMINAL
24
POS TERMINAL
26
POS TERMINAL
28

FIG. 1

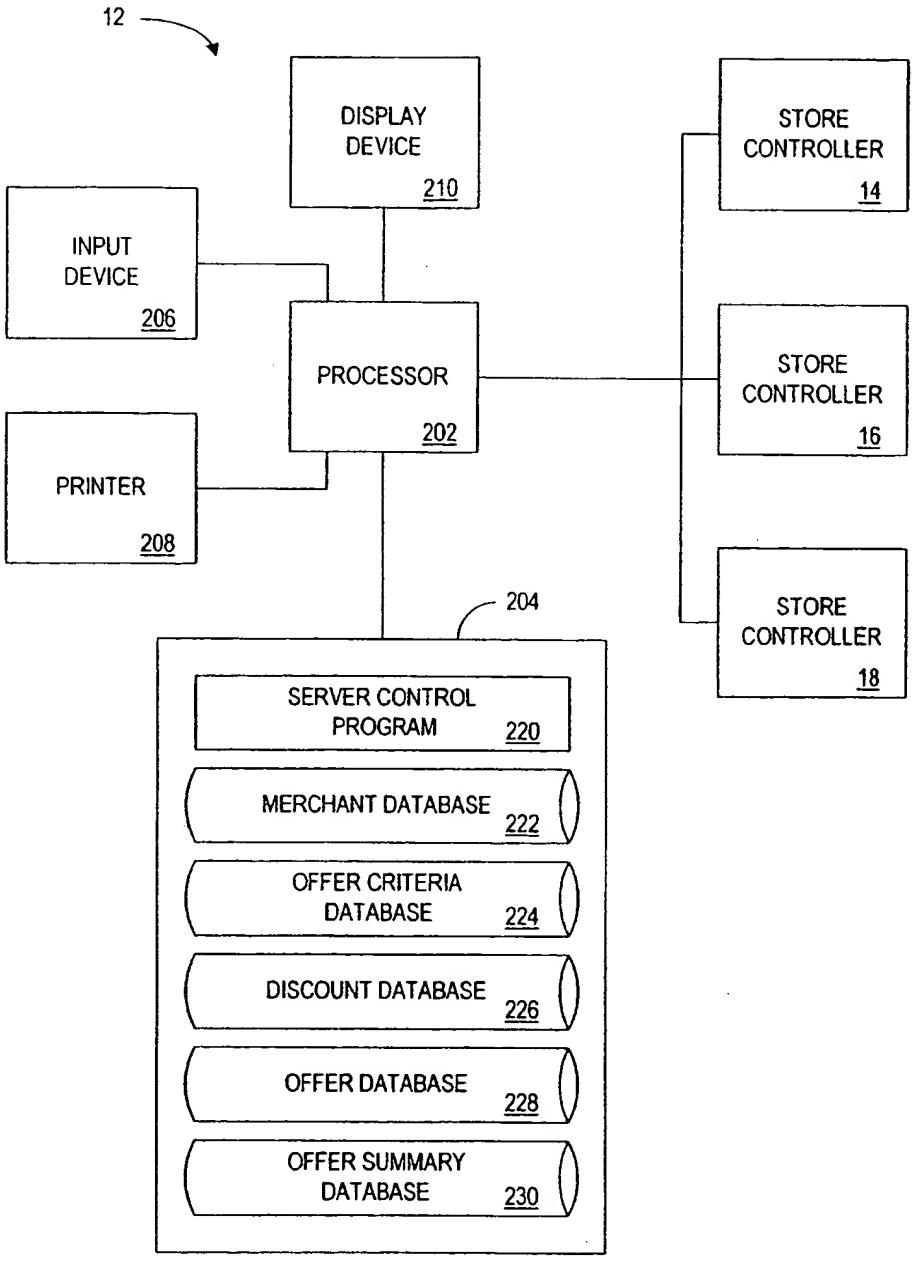
12
DISPLAY DEVICE 210
INPUT DEVICE 206
PROCESSOR 202
PRINTER 208
STORE CONTROLLER 14
STORE CONTROLLER 16
STORE CONTROLLER 18
204
SERVER CONTROL PROGRAM 220
MERCHANT DATABASE 222
OFFER CRITERIA DATABASE 224
DISCOUNT DATABASE 226
OFFER DATABASE 228
OFFER SUMMARY DATABASE 230

FIG. 2

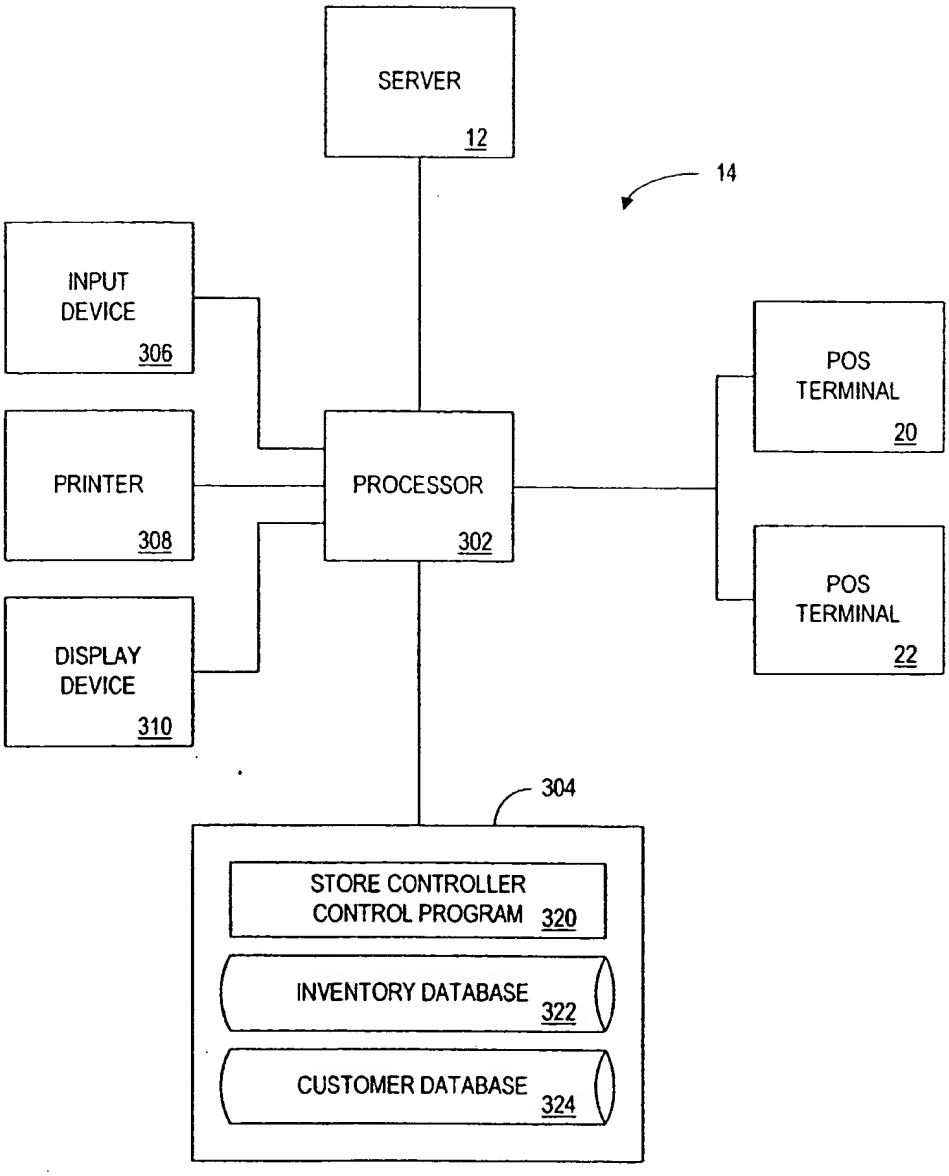
SERVER
12
14
INPUT DEVICE
306
PRINTER
308
DISPLAY DEVICE
310
PROCESSOR
302
POS TERMINAL
20
POS TERMINAL
22
304
STORE CONTROLLER CONTROL PROGRAM 320
INVENTORY DATABASE 322
CUSTOMER DATABASE 324

FIG. 3

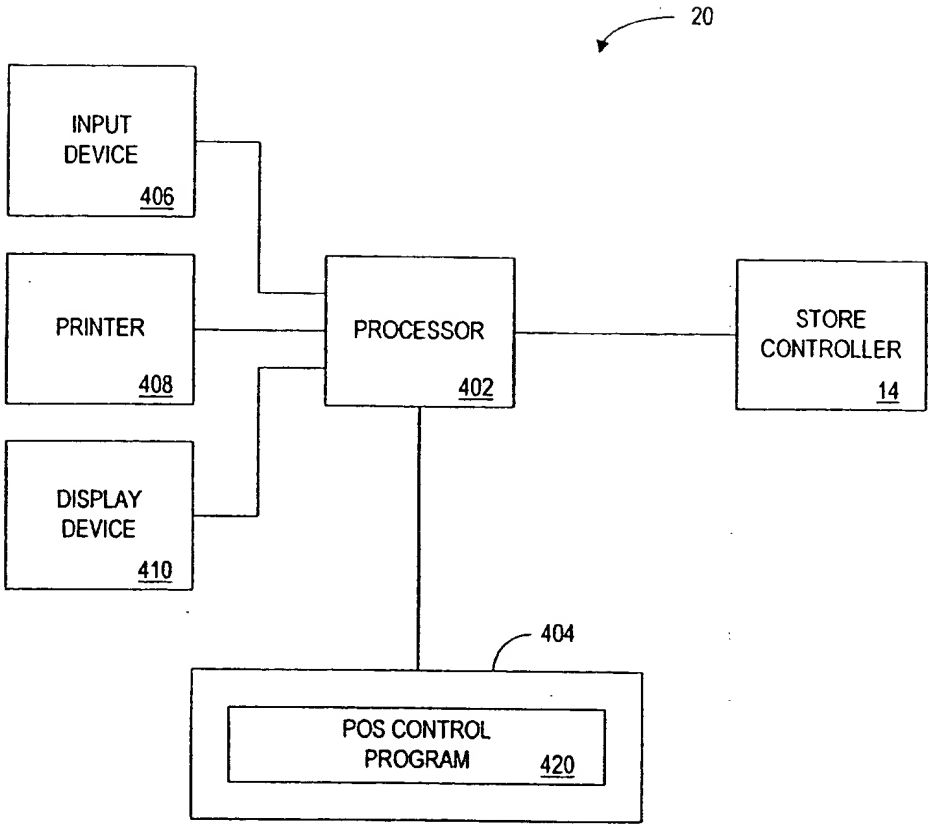
20
INPUT DEVICE 406
PRINTER 408
DISPLAY DEVICE 410
PROCESSOR 402
STORE CONTROLLER 14
404
POS CONTROL PROGRAM 420

FIG. 4

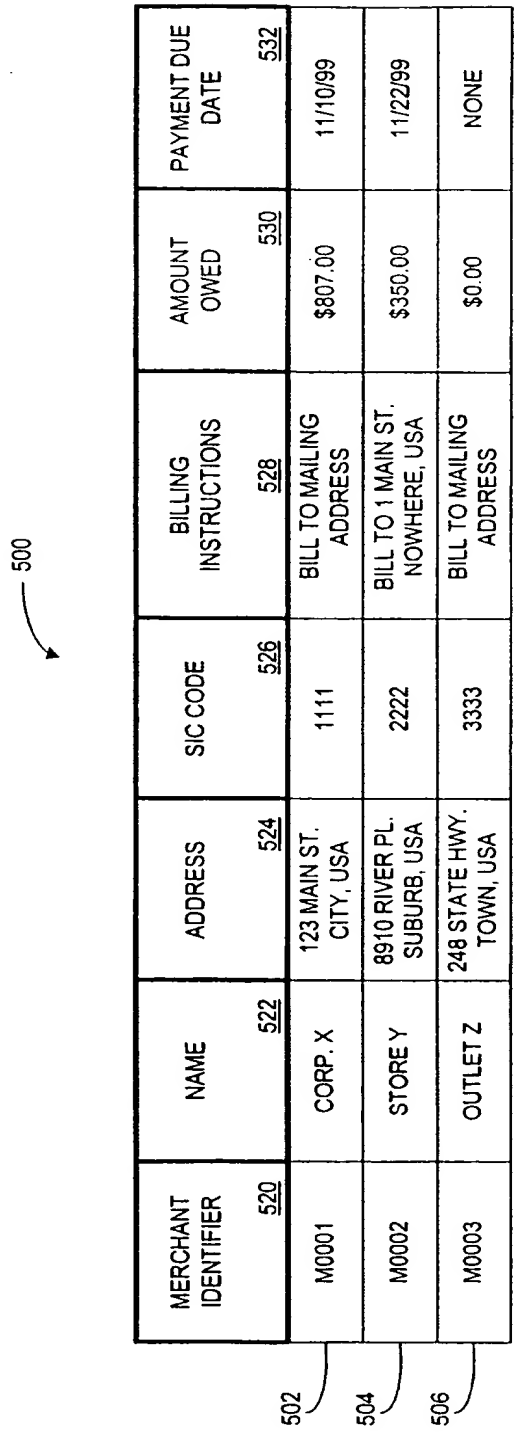
500
MERCHANT IDENTIFIER 520
NAME 522
ADDRESS 524
SIC CODE 526
BILLING INSTRUCTIONS 528
AMOUNT OWED 530
PAYMENT DUE DATE 532
M0001
CORP. X
123 MAIN ST. CITY, USA
1111
BILL TO MAILING ADDRESS
$807.00
11/10/99
M0002
STORE Y
8910 RIVER PL. SUBURB, USA
2222
BILL TO 1 MAIN ST. NOWHERE, USA
$350.00
11/22/99
M0003
OUTLET Z
248 STATE HWY. TOWN, USA
3333
BILL TO MAILING ADDRESS
$0.00
NONE
502
504
506

FIG. 5

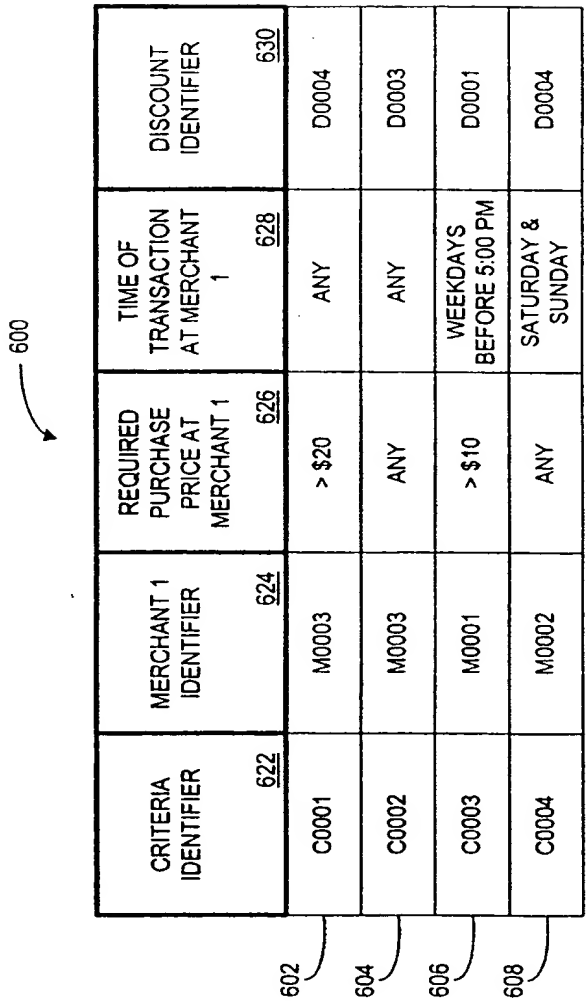
600
CRITERIA IDENTIFIER 622
MERCHANT 1 IDENTIFIER 624
REQUIRED PURCHASE PRICE AT MERCHANT 1 626
TIME OF TRANSACTION AT MERCHANT 1 628
DISCOUNT IDENTIFIER 630
C0001 M0003 > $20 ANY D0004
C0002 M0003 ANY ANY D0003
C0003 M0001 > $10 WEEKDAYS BEFORE 5:00 PM D0001
C0004 M0002 ANY SATURDAY & SUNDAY D0004
602
604
606
608

FIG. 6

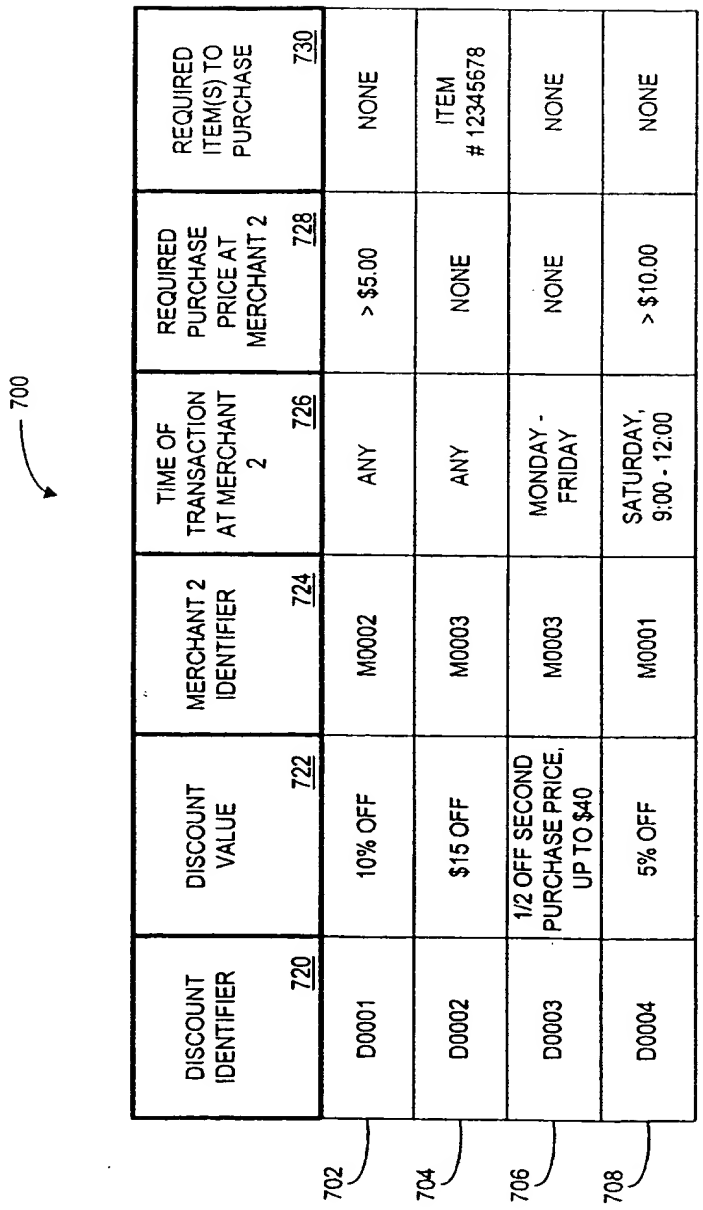
700
DISCOUNT IDENTIFIER 720
DISCOUNT VALUE 722
MERCHANT 2 IDENTIFIER 724
TIME OF TRANSACTION AT MERCHANT 2 726
REQUIRED PURCHASE PRICE AT MERCHANT 2 728
REQUIRED ITEM(S) TO PURCHASE 730
D0001
10% OFF
M0002
ANY
> $5.00
NONE
D0002
$15 OFF
M0003
ANY
NONE
ITEM # 12345678
D0003
1/2 OFF SECOND PURCHASE PRICE, UP TO $40
M0003
MONDAY - FRIDAY
NONE
NONE
D0004
5% OFF
M0001
SATURDAY, 9:00 - 12:00
> $10.00
NONE
702
704
706
708

FIG. 7

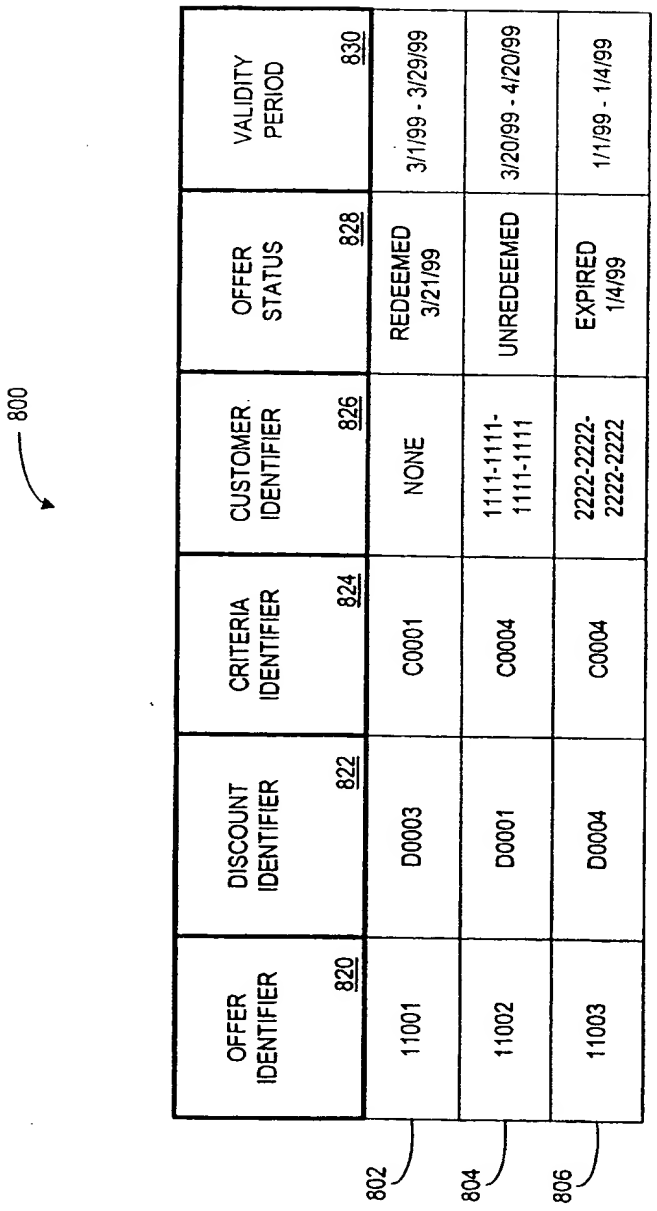
800
OFFER IDENTIFIER 820
DISCOUNT IDENTIFIER 822
CRITERIA IDENTIFIER 824
CUSTOMER IDENTIFIER 826
OFFER STATUS 828
VALIDITY PERIOD 830
11001
D0003
C0001
NONE
REDEEMED 3/21/99
3/1/99 - 3/29/99
11002
D0001
C0004
1111-1111-1111-1111
UNREDEEMED
3/20/99 - 4/20/99
11003
D0004
C0004
2222-2222-2222-2222
EXPIRED 1/4/99
1/1/99 - 1/4/99
802
804
806

FIG. 8

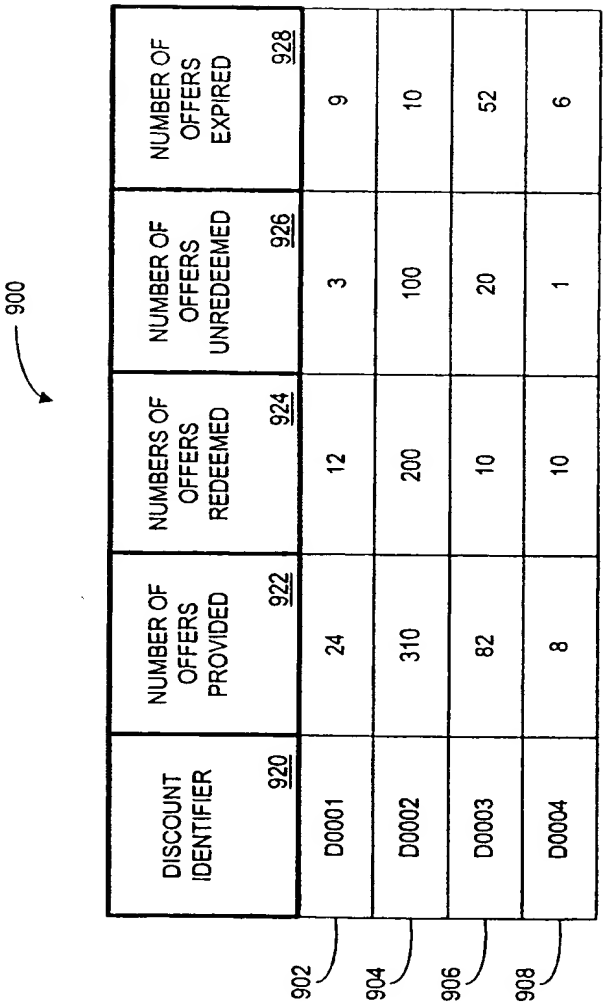
900
DISCOUNT IDENTIFIER 920
NUMBER OF OFFERS PROVIDED 922
NUMBERS OF OFFERS REDEEMED 924
NUMBER OF OFFERS UNREDEEMED 926
NUMBER OF OFFERS EXPIRED 928
D0001 24 12 3 9
D0002 310 200 100 10
D0003 82 10 20 52
D0004 8 10 1 6
902
904
906
908

FIG. 9

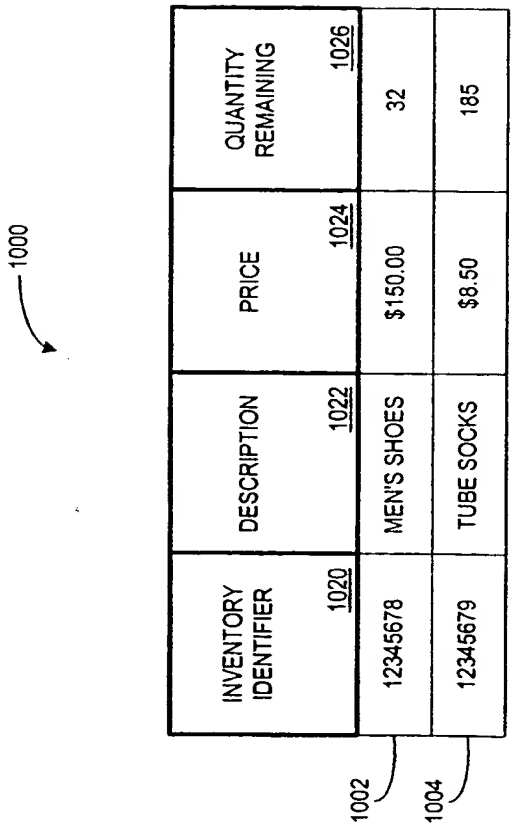
1000
INVENTORY IDENTIFIER 1020
DESCRIPTION 1022
PRICE 1024
QUANTITY REMAINING 1026
12345678
MEN'S SHOES
$150.00
32
12345679
TUBE SOCKS
$8.50
185
1002
1004

FIG. 10

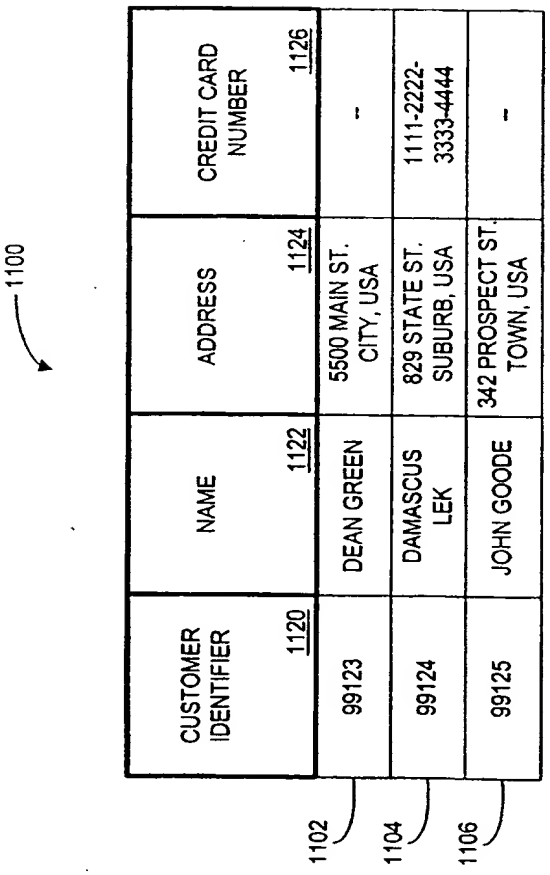
1100
CUSTOMER IDENTIFIER 1120
NAME 1122
ADDRESS 1124
CREDIT CARD NUMBER 1126
99123
DEAN GREEN
5500 MAIN ST. CITY, USA
--
99124
DAMASCUS LEK
829 STATE ST. SUBURB, USA
1111-2222-3333-4444
99125
JOHN GOODE
342 PROSPECT ST. TOWN, USA
--
1102
1104
1106

FIG. 11

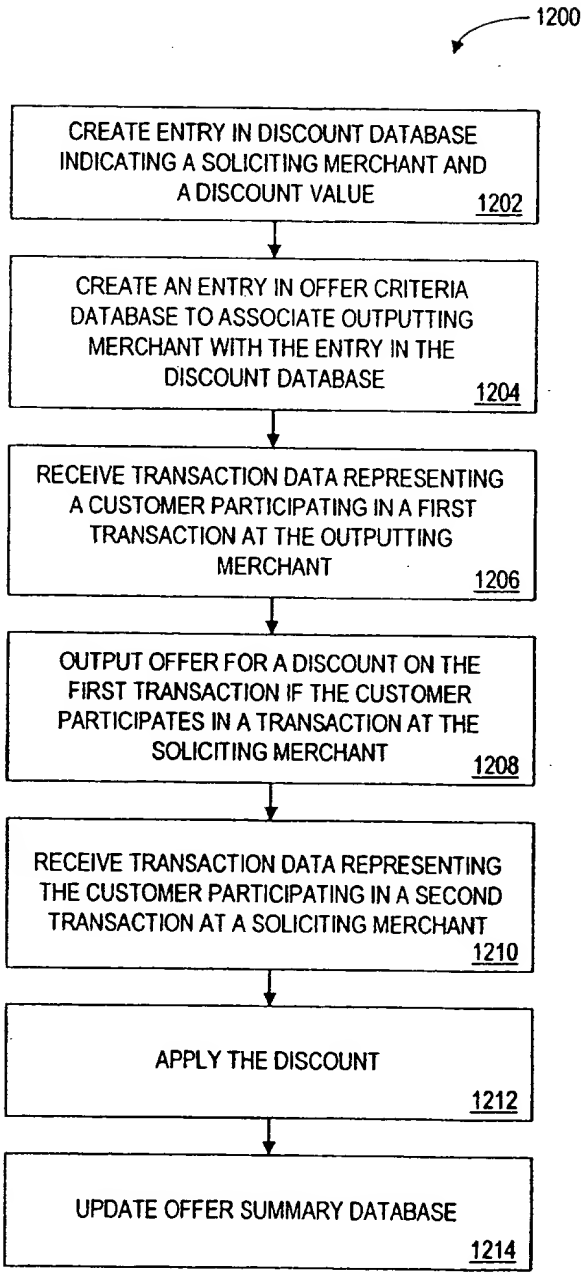
1200
CREATE ENTRY IN DISCOUNT DATABASE INDICATING A SOLICITING MERCHANT AND A DISCOUNT VALUE
1202
CREATE AN ENTRY IN OFFER CRITERIA DATABASE TO ASSOCIATE OUTPUTTING MERCHANT WITH THE ENTRY IN THE DISCOUNT DATABASE
1204
RECEIVE TRANSACTION DATA REPRESENTING A CUSTOMER PARTICIPATING IN A FIRST TRANSACTION AT THE OUTPUTTING MERCHANT
1206
OUTPUT OFFER FOR A DISCOUNT ON THE FIRST TRANSACTION IF THE CUSTOMER PARTICIPATES IN A TRANSACTION AT THE SOLICITING MERCHANT
1208
RECEIVE TRANSACTION DATA REPRESENTING THE CUSTOMER PARTICIPATING IN A SECOND TRANSACTION AT A SOLICITING MERCHANT
1210
APPLY THE DISCOUNT
1212
UPDATE OFFER SUMMARY DATABASE
1214

FIG. 12

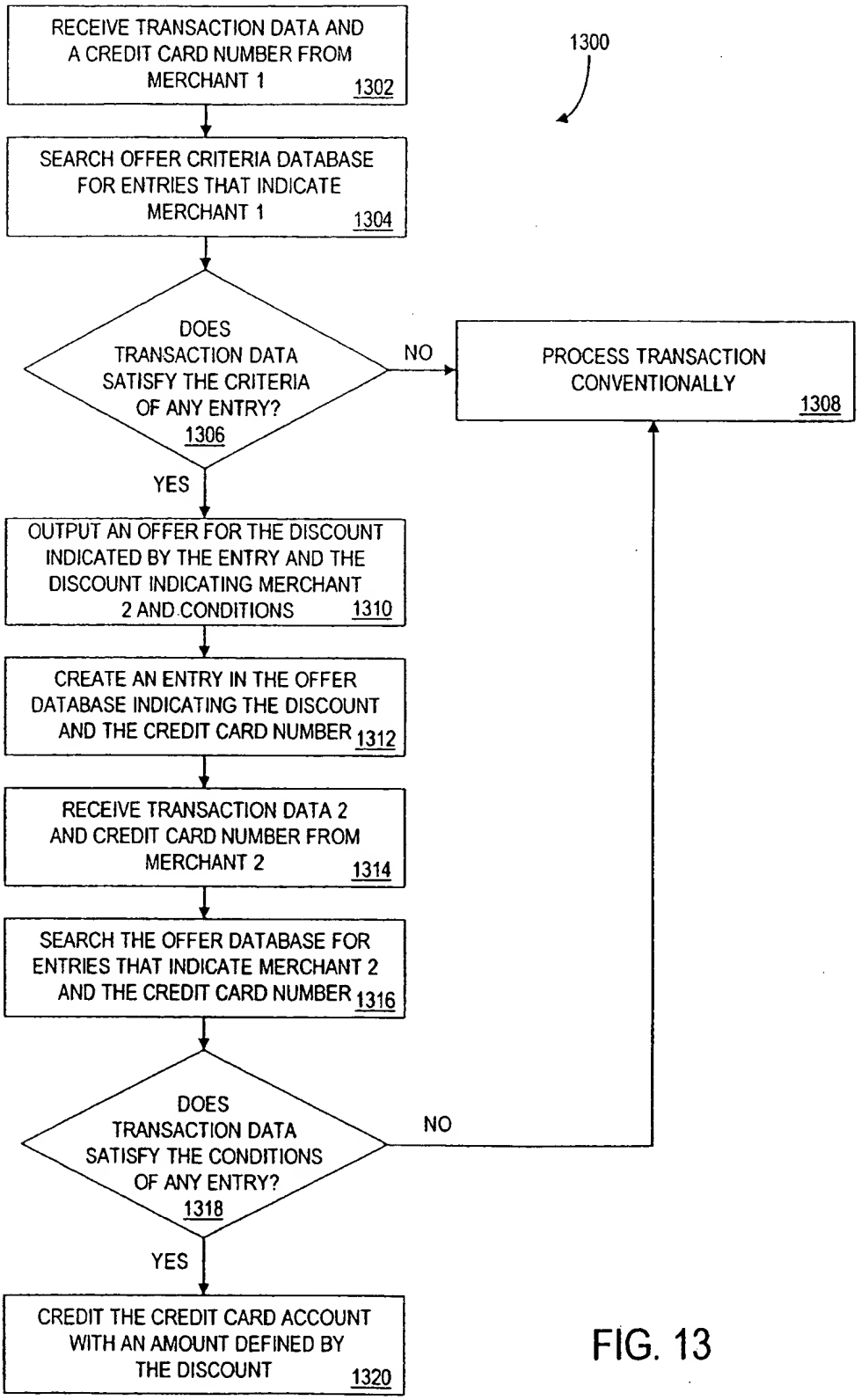
1300
RECEIVE TRANSACTION DATA AND A CREDIT CARD NUMBER FROM MERCHANT 1 1302
SEARCH OFFER CRITERIA DATABASE FOR ENTRIES THAT INDICATE MERCHANT 1 1304
DOES TRANSACTION DATA SATISFY THE CRITERIA OF ANY ENTRY? 1306
NO
PROCESS TRANSACTION CONVENTIONALLY 1308
YES
OUTPUT AN OFFER FOR THE DISCOUNT INDICATED BY THE ENTRY AND THE DISCOUNT INDICATING MERCHANT 2 AND CONDITIONS 1310
CREATE AN ENTRY IN THE OFFER DATABASE INDICATING THE DISCOUNT AND THE CREDIT CARD NUMBER 1312
RECEIVE TRANSACTION DATA 2 AND CREDIT CARD NUMBER FROM MERCHANT 2 1314
SEARCH THE OFFER DATABASE FOR ENTRIES THAT INDICATE MERCHANT 2 AND THE CREDIT CARD NUMBER 1316
DOES TRANSACTION DATA SATISFY THE CONDITIONS OF ANY ENTRY? 1318
NO
YES
CREDIT THE CREDIT CARD ACCOUNT WITH AN AMOUNT DEFINED BY THE DISCOUNT 1320

FIG. 13

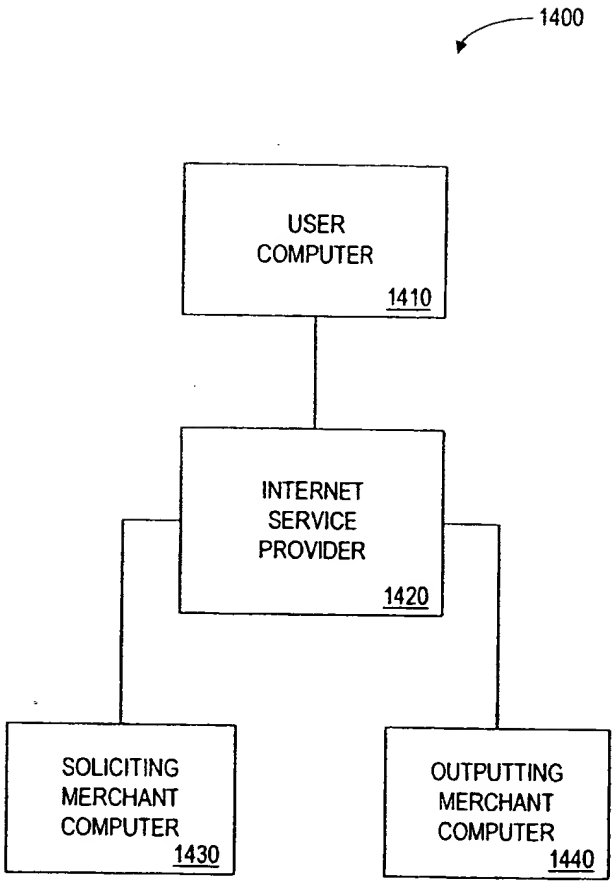
1400
USER COMPUTER 1410
INTERNET SERVICE PROVIDER 1420
SOLICITING MERCHANT COMPUTER 1430
OUTPUTTING MERCHANT COMPUTER 1440

FIG. 14

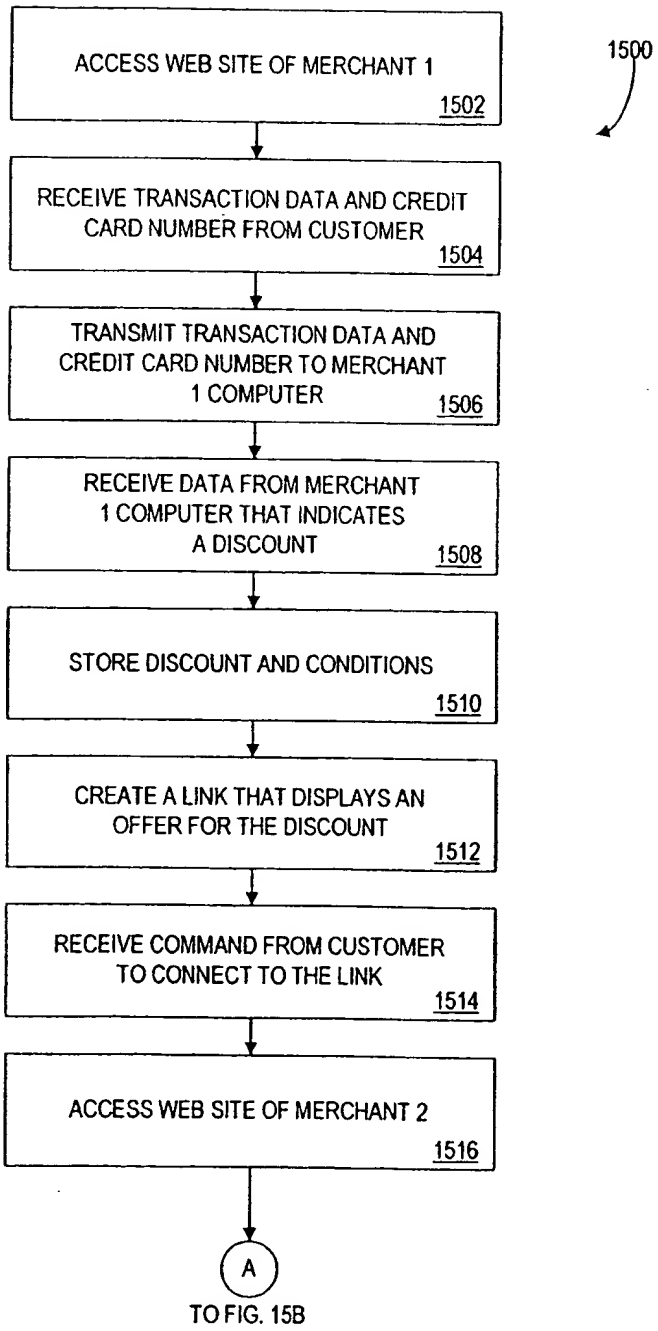
ACCESS WEB SITE OF MERCHANT 1
1502
1500
RECEIVE TRANSACTION DATA AND CREDIT CARD NUMBER FROM CUSTOMER
1504
TRANSMIT TRANSACTION DATA AND CREDIT CARD NUMBER TO MERCHANT 1 COMPUTER
1506
RECEIVE DATA FROM MERCHANT 1 COMPUTER THAT INDICATES A DISCOUNT
1508
STORE DISCOUNT AND CONDITIONS
1510
CREATE A LINK THAT DISPLAYS AN OFFER FOR THE DISCOUNT
1512
RECEIVE COMMAND FROM CUSTOMER TO CONNECT TO THE LINK
1514
ACCESS WEB SITE OF MERCHANT 2
1516
A
TO FIG. 15B

FIG. 15A

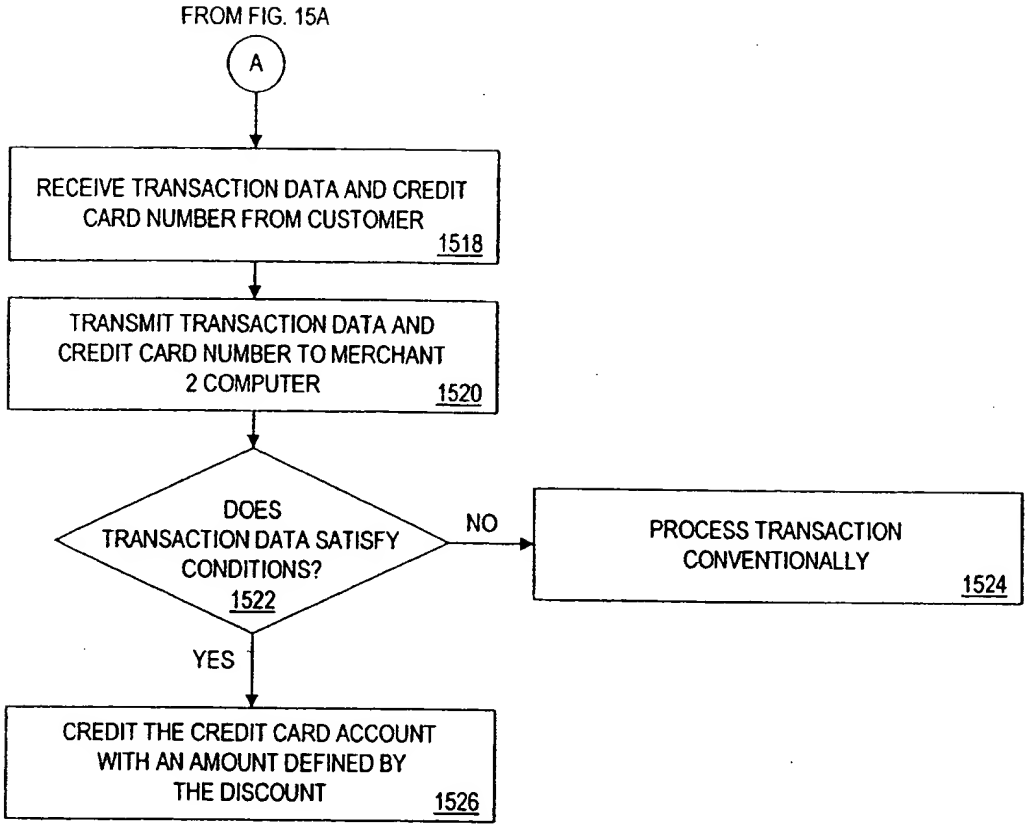
FROM FIG. 15A
A
RECEIVE TRANSACTION DATA AND CREDIT CARD NUMBER FROM CUSTOMER
1518
TRANSMIT TRANSACTION DATA AND CREDIT CARD NUMBER TO MERCHANT 2 COMPUTER
1520
DOES TRANSACTION DATA SATISFY CONDITIONS?
1522
NO
PROCESS TRANSACTION CONVENTIONALLY
1524
YES
CREDIT THE CREDIT CARD ACCOUNT WITH AN AMOUNT DEFINED BY THE DISCOUNT
1526

FIG. 15B

INTERNATIONAL SEARCH REPORT

Inte. ional Application No
PCT/US 99/21720

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 06050 A (FIRST DATA CORP) 12 February 1998 (1998-02-12) abstract; claim 1 page 1, line 4 - line 12 page 2, line 18 - line 28 page 3, line 15 -page 4, line 7	1-40
X	WO 98 28699 A (MERIDIAN ENTERPRISES INC) 2 July 1998 (1998-07-02) abstract page 1, line 10 -page 2, line 23	1-40

-/—

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
16 March 2000	23/03/2000

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Suendermann, R

1

Form PCT/ISA/210 (second sheet) (July 1992)

International Application No
PCT/US 99/21720

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 537 314 A (KANTER MARK W) 16 July 1996 (1996-07-16) abstract; claim 1 column 6, line 49 - line 67 column 7, line 25 - line 40 column 8, line 50 -column 9, line 30 column 16, line 35 -column 17, line 22	1-40

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inte[illegible]onal Application No
PCT/US 99/21720

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9806050 A	12-02-1998	AU 3969197 A	25-02-1998
		EP 0978076 A	09-02-2000
WO 9828699 A	02-07-1998	AU 3497397 A	17-07-1998
		CA 2210218 A	24-06-1998
US 5537314 A	16-07-1996	NONE	